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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,009	02/23/2004	Kenneth Gaylord Parrent		7470

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Kenneth G. Parrent  
148 E DIVISION  
FAIRFIELD, MT 59436

EXAMINER

CHAUDHRY, SAEED T

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,009	<b>Applicant(s)</b> PARRENT, KENNETH GAYLORD	
	<b>Examiner</b> Saeed T. Chaudhry	<b>Art Unit</b> 1746	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### **Claim Rejections - 35 USC § 112**

**Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

The preamble of claim 1 is indefinite in the recitation of “method and apparatus”. The applicant is advised to delete “apparatus” from the preamble because claim recite method limitations and reciting both terms make the claim indefinite.

The terms "high-velocity", “low-velocity”, “high-kinetic-energy” and “low-kinetic-energy” in claims 1 and 2 are relative terms which renders the claim indefinite. The terms "high and low" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 1 recites the limitation "said washing apparatus" in line 5. There is insufficient antecedent basis for this limitation in the claim. The applicant is advised to change “said” to “a”.

Claim 1 recites the limitation "said first and second streams of combined" in line 12. There is insufficient antecedent basis for this limitation in the claim. The applicant is advised to delete “said”.

Claim 1 recites the limitation "said high-velocity, high-kinetic-energy stream" in line 17. There is insufficient antecedent basis for this limitation in the claim. The applicant is advised to delete “high-velocity, high-kinetic-energy”.

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Claim 1 recites the limitation "said soil-washing apparatus" in line 18. There is insufficient antecedent basis for this limitation in the claim. The applicant is advised to delete "soil".

Claim 1 recites limitation "previously injected into said washing chamber" is confusing and indefinite since it is not understood when previously injected step is performed.

Claim 1 recites the limitation "said two streams" in line 22. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said faceted inner surfaces" in lines 26 to 27. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said high-velocity admixture" and "said primary passages" in line 32. There is insufficient antecedent basis for this limitation in the claim.

Claim 1, recites limitations in lines 37-39. It is not understood what is meant by these terms.

Claim 1 is incomplete and confusing since steps for washing from fine grained soil particles are not recited and it is not clear how the soil is washed by just mixing the slurry with two liquid streams.

Claim 2 recites "by pumping said wash fluid . . ." in lines 6-7. It is confusing and indefinite since it is not clear how this is related to the apparatus.

Claim 2 recites the limitation "said primary passages" in line 8. There is insufficient antecedent basis for this limitation in the claim.

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Claim 2 recites the limitation "said streams of contaminated slurry" in lines 16-17.

There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "said downward slop" in line 24. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "said multifaceted surface" in line 26. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 is indefinite and confusing since it is not clear that which structure is being claimed. The applicant is advised to claim the structure limitations rather than method being performed by the apparatus.

### **Claim Rejections - 35 USC § 103**

**The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shechter et al (6,443,610 or 6,749,329).**

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Shechter et al (6443610 and 6,749,329) disclose a method and apparatus for processing product components comprising, two nozzles configured to deliver respective jets of liquid along two different substantially opposite and substantially co-linear paths (20), and an elongated confinement chamber configured to receive the respective jets of liquid at opposite ends (20) thereof and in which the two paths meet, the confinement chamber being configured to form a stream of fluid from the two jets of liquid, the stream of fluid following a path that is in substantially the opposite direction from one of the paths of one of the jets of liquid so that the stream of fluid interacts with one of the jets of liquid within the elongated confinement chamber. An inlet port (27 or 28) configured for receiving a second fluid, the inlet port aligned to position the received second fluid such that the jets cause sheer and cavitation in the second fluid. The nozzles and the elongated confinement chamber are configured so that the jets of liquid have a velocity of about 500 ft/sec or greater (see claim and Fig. 4 of 610).

A method of processing product components comprising: directing a first jet of fluid along a first path; directing a second jet of fluid along a second path; causing sheer and cavitation in a third fluid by positioning the fluid between the jets and using a gas to position the third liquid. Wherein the third fluid includes solids such as powders, granules, and slurries (see claims and Fig 4 of '329). The references fails to disclose multiple inlets for fluid having solids and streams of first fluid are injected at 10 degrees downward angle and streams of admixture at a velocity of 1200 ft/sec.

It would have been obvious at the time applicant invented the claimed process and apparatus to manipulate the velocity of the stream for better and efficient results because

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Shechter et al disclose to use velocity more than 500 ft/sec. Further, one of ordinary skill in the art would have manipulated the angle of injection of fluid stream in the apparatus with routine experimentations to achieve good results. Furthermore, it would have been held obvious to duplicate parts for multiplied effect i.e. multiple inlets to achieve more production from the apparatus because more inlets would increase the output of the product (see St. Regis Paper Co. v. Bemis Co., Inc., 193 USPQ 8, 11 (7<sup>th</sup> Cir. 1977). Furthermore, rinsing, neutralizing, disposing and recycling in the apparatus claims has not given weigh since it is not clear how these are attached to the claimed apparatus and one of ordinary skill in the art would expect to remove solids from a fluid streams with filtration and recycle the water to reduce the liquid consumption.

#### **The Prior art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Langenecker (6,123,483) disclose a method of treating contaminated soil and mud by mixing a contaminated material with water and separating particles.

Silva (4,834,782) discloses method and apparatus for intimately mixing and contacting first and second fluids for purposes of scrubbing and cleaning one of the fluids with the other.

***Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.***

***If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.***

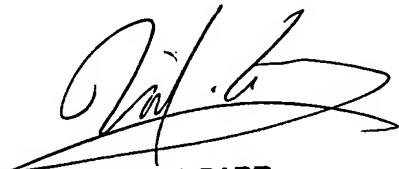
***When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.***

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*Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.*

*Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).*

**Saeed T. Chaudhry**  
**Patent Examiner**



**MICHAEL BARR**  
**SUPERVISORY PATENT EXAMINER**